

**Documentation of statistics for  
Prices and price index for agriculture 2018**

## 1 Introduction

The purpose of these statistics is to show actual changes (monthly, quarterly or yearly) in prices in agriculture to indicate developments in overall economics in agriculture. A part of the statistics have been calculated since 1956, but since 1976 the most widely definition has been used, which includes horticulture, fur production and products from bees and wild game. Base year in the prices indices is changed every fifth year, and latest base year is 2015.

## 2 Statistical presentation

The Statistics contains for almost all items, monthly, quarterly and yearly information of agricultural prices, as well on sale products as on most products used in the intermediate consumption including capital formation. Some prices are only obtainable as price indices only, especially regarding intermediate consumption. The statistics covers both agriculture and horticulture.

### 2.1 Data description

The indices are aggregated by weighing into total indices for output and input in agriculture. The starting point for indices is a basic year, renewed every fifth year. The statistics on prices are concerning products almost covering the same as in Economic Accounts for Agriculture. However, secondary activities, agricultural services and indirect interests on bank loans (FISIM) are excluded. However, the gross capital formation is included in the price statistics, covering machinery, equipment, farm building and land improvement. Purpose of the statistic is particularly to illustrate current shifts in primary agricultural prices as an indicator for the development of rural economy. Until the late 1980s was a direct relative term statistics released on a monthly basis since quarterly. From 2013, supplemented by annual publication due to merger with other price statistic. The point of observation is the farm gate, meaning when sale products leave the farm and when input products arrived at the farm gate.

### 2.2 Classification system

The cluster followed is the main branch 01, Agriculture, hunting, forestry and fishing. For more details see DB07.

### 2.3 Sector coverage

Agriculture and Horticulture.

### 2.4 Statistical concepts and definitions

Price index: When calculating price index, the Laspeyres index is used.

### 2.5 Statistical unit

Gathered data from legal entities.

## **2.6 Statistical population**

Prices and price index for agriculture.

## **2.7 Reference area**

Denmark.

## **2.8 Time coverage**

The statistic covers from 2005 and forward.

## **2.9 Base period**

Basic year is changed every 5 years. 2015 is the last year used as the base year.

## **2.10 Unit of measure**

Monthly prices are expressed in absolute values, i.e. crowns (DKK). For quarters, there are indices. Finally, for the yearly prices there are both indices with 2015 = 100 and values in absolute values, i.e. crowns (DKK). Prices are without VAT.

## **2.11 Reference period**

Calendar month, quarter and calendar year.

## **2.12 Frequency of dissemination**

Monthly, quarterly and annually. Tables for selected agricultural prices for potted plants is published monthly.

## **2.13 Legal acts and other agreements**

The right to collect data can be found in the Law on Statistics Denmark § 1, cf. Consolidated Act no. 1189 of 21 December 1992 with the changes imposed by § 1 of the Law no. 295 of 2 May 2000. More legal acts are indirect related to the surveys, in particular the act on Economic Account for Agriculture (2004/138) and legal acts on animal production. A common manual about the quarterly prices indices and also absolute prices, "Agricultural Prices and Indices", is developed in Eurostat.

## **2.14 Cost and burden**

There are not compiled a response burden because of the very different character of the information received. However, roughly the burden is expectedly 0.1-0.2 annual working units.

## 2.15 Comment

Further information can be found at the [Price and indices for agriculture](#) for these statistics, or by contacting Statistics Denmark directly.

## 3 Statistical processing

Data for this statistics is collected at different frequencies from multiple sources. The collected data undergoes a simple validation. Once data is validated, aggregation occurs for a portion of data before publication, while other data is while other data is published directly.

### 3.1 Source data

Information on sale products plus seeds, fertilizers, feed, pesticides etc, is based on data deliveries from buyers and suppliers to farmers and from public authorities. Information on prices on energy, maintenance, services and capital formation is based on the data used in Statistic Denmark's general statistics on prices. For more information see documentation of statistics Slaughter animals and meat production, Milk and dairy products, Eggs production.

### 3.2 Frequency of data collection

Data collected primarily on a weekly or monthly basis. However, there are also quarterly and annually collections. Wages and land prices are examples of yearly prices.

### 3.3 Data collection

The data received comes from web questionnaires upload solution and data registers and quotations.

### 3.4 Data validation

The incoming data is kept against historical data and current knowledge collected in the field of professional journals so that unrealistic changes in prices are detected.

### 3.5 Data compilation

There are absolute and indexed figures published for prices in agriculture. The absolute figures are not treated, as the average of the collected figures is published without further processing. The index figures are weighted based on the gross factor income level of the individual goods in the base year 2015. Furthermore, there is a weighting of months, based on an individual assessment of the level of sales each month throughout the year 2015, which underlies the weighting of individual commodities. The weighting monthly is aggregated to quarterly weight. If a product group's sales were to change dramatically, the weighting could provide some distortion in comparison to how the individual goods real importance, and may give a distorted picture of the real world. This is inevitable, why there is a rebasing taking place each 5th year where all weights are reviewed and product groups' composition.

### **3.6 Adjustment**

No corrections are made, however, weighted prices according to season's importance. For example, grain prices are higher in September just after harvest than in March.

## **4 Relevance**

The statistics are used by agricultural organizations and ministries to monitor price developments within the industry as well as as a basis for various analyses and forecasts. The basic data and results of the statistics are also applied to other statistical areas in Denmark Statistics, for example, for the calculation of the gross income of agriculture as used in the National Accounts.

### **4.1 User Needs**

The main users are the EU and the agricultural organizations. Furthermore, the indices are used in relation to the Economic Accounts for Agriculture.

### **4.2 User Satisfaction**

It is perceived that there are great user satisfaction from people in the business.

### **4.3 Data completeness rate**

The statistics meet all requirements of regulations and guidelines.

## **5 Accuracy and reliability**

On some products, i.e. horticultural products, qualities and types are several and dynamic. It makes it a little difficult to be sure on the representativeness of the prices followed. Concerning input prices based on general price statistics, the situation in agriculture may not be fully reflected. Some indices on volumes are indirectly measured based on values and price indices. This method can lead to inaccuracy. The declaration on content on Economic Account for Agriculture and these on animal production includes more information on possible inaccuracy. Because of the very different picture of sources, margins of statistical errors can not be calculated. However, for main output products, i.e. milk and meat, the coverage and accuracy are close to 100 per cent. Prices on cereals and feeding stuff (concentrates) are based on more than 70 per cent of total volume, which ensure high reliability. In general, the accuracy is highest on sales product and less high on intermediate consumption and goods for capital formation.

### **5.1 Overall accuracy**

The overall accuracy is considered to be high, in particular on main products and inputs.

### **5.2 Sampling error**

Not relevant for these statistics.

### **5.3 Non-sampling error**

Not relevant for these statistics.

### **5.4 Quality management**

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

### **5.5 Quality assurance**

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

### **5.6 Quality assessment**

The overall accuracy is described as good, especially for products with great importance. For some products, such as horticultural products, there is a very wide range of grades and product types, which can make it difficult to ensure price indices agree continuous representation. For the production factors which price is based on the general price statistics, there may be special circumstances relating to agriculture, which is not reflected. Some volume for the use of indices to gross agricultural factor income is calculated indirectly using the value development and price index, which does not give a completely accurate result.

### **5.7 Data revision - policy**

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

### **5.8 Data revision practice**

In connection with regulation, an assessment of data is made. Here is a look at whether new products have been added or others have been deleted.

## **6 Timeliness and punctuality**

The statistics are published without delay in relation to scheduled release times.

### **6.1 Timeliness and time lag - final results**

The first data, especially monthly, is preliminary.

## **6.2 Punctuality**

These statistics are published without delay, with reference to the announced time of publication in the release calendar.

## **7 Comparability**

Not applicable.

### **7.1 Comparability - geographical**

Not applicable.

### **7.2 Comparability over time**

The indices are not fully comparable over time as the base year is changed every five years. The latest rebasing (2015=100) took place in 2018.

### **7.3 Coherence - cross domain**

For selected agricultural products, they are also highlighted by the Knowledge Center for Agriculture, Agriculture and Food.

### **7.4 Coherence - internal**

Not relevant for these statistics.

## **8 Accessibility and clarity**

These statistics are published quarterly in a Danish press release. In the StatBank, these statistics can be found under the subject [Prices and price index for agriculture](#). These statistics are also presented in the [Statistical Yearbook](#). For further information, go to the [subject page](#).

### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

#### **8.4 News release**

These statistics are published quarterly in a Danish press release.

#### **8.5 Publications**

These statistics are presented in the [Statistical Yearbook](#).

#### **8.6 On-line database**

The statistics are published in the StatBank under the subject Prices and price index for agriculture in the following tables:

- [LPRIS10](#): Prices on selected agricultural output by product, unit and time
- [LPRIS27](#): Price indices for agricultural sale and purchase by product, unit and time
- [LPRIS26](#): Price indices for agricultural sale and purchase by product, unit and time
- [LPRIS31](#): Prices at agricultural output by product, unit and time
- [LPRIS36](#): Prices at agricultural input by product, unit and time
- [LPRIS16](#): Sales prices at pot plants by pot plants, unit and time
- [LPRIS21](#): Price indices for agricultural sale and purchase by product, unit and time

#### **8.7 Micro-data access**

Researchers and other analysts from authorized research institutions, can be granted access to the underlying micro-data by contacting [Research Services](#).

#### **8.8 Other**

An index is provided to Eurostat on a quarterly and annual basis. In addition, Eurostat receives annual prices in absolute values. Data for all EU countries can be found on Eurostat website.

#### **8.9 Confidentiality - policy**

[Data Confidentiality Policy](#) at Statistics Denmark.

#### **8.10 Confidentiality - data treatment**

Certain prices are not available due to confidentiality, but are included in the overall indices. These statistics are not published at a level of detail that requires discretion.

#### **8.11 Documentation on methodology**

A description of definitions and methodology is available in the Eurostat publication EU-handbook on Agricultural Price Statistics, [Handbook for EU Agricultural Price Statistics, version 2.0](#) 2008.

Furthermore, a methodological description appears in the publication Index calculations at Statistics Denmark. [Indeksberegninger i Danmarks Statistik](#).



## **8.12 Quality documentation**

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## **9 Contact**

The administrative placement of these statistics is in the division of Food Industries. The person responsible is Mona Larsen, tel.: + 45 3917 3399, e-mail: mla@dst.dk.

### **9.1 Contact organisation**

Statistics Denmark

### **9.2 Contact organisation unit**

Food Industries, Business Statistics

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